





Name:	
Enrolment No:	

UPES
End Semester Examination, December 2023

Course : Introduction to IT systems for Health Sciences	Semester : I
Program : B.Tech(BT)/B.Tech(FT)	Duration : 3 Hours
Course Code: HSBT1003	Max. Marks: 100

Instructions:

S. No.	Section A Short answer questions/ MCQ/T&F (20Qx1.5M= 30 Marks)	Marks	COs
Q 1	List two devices which can be used as input as well as output device.	1.5	CO1
Q 2	Differentiate between RAM and ROM	1.5	CO1
Q 3	Which of the following is/are true regarding the SRAM and DRAM: A. SRAM is slower than DRAM. B. DRAM is slower than SRAM. C. SRAM is used for main memory. D. DRAM is used for main memory. E. SRAM is a construction of tiny capacitors that leak electricity.	1.5	CO1
Q 4	What are the differences between information and data?	1.5	CO1
Q 5	List out the types of data.	1.5	CO2
Q 6	Define database.	1.5	CO2
Q 7	What is an ER-diagram?	1.5	CO2
Q 8	Write a formula to sort data in excel cells.	1.5	CO3

Q 9	Match the symbols used in the DFD with their functions.		1.5	CO3		
	1				A	Process
	2				B	Data store
	3		C	External entity		
Q 10	<p>The use of computers and information technology in monitoring outbreaks of contagious disease is called ----</p> <p>A. Infectious disease assessment B. Bioinformatics C. Dental informatics D. Public health informatics</p>		1.5	CO4		
Q 11	<p>Which of the following identifies data flow in motion?</p> <p>A. Circle B. Arrow C. Open ended box D. Square</p>		1.5	CO3		
Q 12	List out the project management metrics.		1.5	CO5		
Q 13	What are the different types of LIMS?		1.5	CO5		
Q 14	What are the main workhorses in pharmaceutical analysis?		1.5	CO4		
Q 15	What are the high-level ECM vendors in current TIMS products?		1.5	CO4		
Q 16	What do you mean by data labels in excel graphs?		1.5	CO3		
Q 17	What are the advantages of in-memory processing?		1.5	CO1		
Q 18	List few of the applications of computer technology in pharmaceutical medical sciences.		1.5	CO1		
Q 19	What is the difference between SQL and NoSQL?		1.5	CO2		
Q 20	How physical DFD is different from logical DFD?		1.5	CO2		

Section B (4Qx5M=20 Marks)			
Q 1	Explain briefly about special purpose registers.	5	CO1
Q 2	What is Tableau? Brief about the different Tableau products.	5	CO3
Q 3	What do you understand by the terms (i) LMIS and (ii) TIMS?	5	CO5
Q 4	Briefly describe the Protein and Genome databanks.	5	CO2
Section C (2Qx15M=30 Marks)			
Q 1	a) Explain functional block diagram of a computer. b) Write down the differences between DRAM and SRAM.	10+5	CO1
Q 2	a) What do you mean by requirement analysis and the feasibility analysis of an information system. b) Detail the key aspects of requirement and feasibility analysis.	5+10	CO2
Section D (2Qx10M=20 Marks)			
Q 1	a) Describe the types of laboratory information management systems? b) Detail the drawbacks of CDS.	5+5	CO4
Q 2	What do you mean by process life cycle? Explain the steps of process life cycle.	10	CO5